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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/788,425	03/01/2004	Shinji Ichikawa		4966

7590 03/27/2006

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EXAMINER

CHARIOUI, MOHAMED

ART UNIT	PAPER NUMBER
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2857

DATE MAILED: 03/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/788,425

Applicant(s)

ICHIKAWA ET AL.

Examiner

Mohamed Charioui

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 January 2006.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-6 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 05 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuroda et al. (U.S. 6,314,347) in view of Bullock (U.S. Pub. No. 2002/0120390).

As per claims 1, 2 and 6, Kuroda et al. teach traveling information storing means for storing travel data comprising at least vehicle speed and position of the vehicle (see col. 1, line 35 to col. 2, line 21); candidate traveling speed pattern generating means for generating plural candidate traveling speed patterns on the basis of only the travel data stored in the traveling information storing means (see col. 5, line 10-42 and col. 1, line 35 to col. 2, line 32); estimated traveling speed pattern outputting means for extracting a candidate traveling speed pattern from among the generated traveling speed patterns and outputting an estimated traveling speed pattern for a route to be followed (see col. 1, lines 49-52 and col. 4, lines 55-67).

Kuroda et al. further teach frequent route specifying means for specifying a frequently used route on the basis of the travel data and dividing means for dividing the frequently used route into short sections (claim 2) (see col. 6, lines 46-58 and col. 1, lines 40-48).

Kuroda et al. fail to teach that the travel environment data comprising at least date-and time and weather information as mutually associated data exclusive of the travel data.

Bullock teaches this feature (see paragraphs [0035]; [0037]; and [0040]). It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate Bullock's teaching into Kuroda et al.'s invention because it would provide more information about the travel conditions. Therefore, travel speed pattern would be adequately estimated for an efficient and safe trip.

Kuroda et al. does not to teach estimating traveling speed pattern outputting means for extracting a candidate traveling speed pattern matching current travel environment data from among the generated traveling speed patterns.

Bullock teaches this feature (see paragraphs [0029]; [0035]; [0037]; and [0040]). It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate Bullock's teaching into Kuroda et al.'s invention because an optimum route and traveling speed pattern based on the actual conditions would be generated. Therefore, efficient and safe trip would be made.

As per claim 3, Kuroda et al. further teach that the candidate traveling speed pattern generating means classifies the travel data for each of the short sections on the basis of an average traveling speed for each of the short sections or a degree of similarity among traveling speed patterns for each of the short sections, and generates a traveling speed pattern representing a set of the classified travel data for each of the

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short sections as the candidate traveling speed pattern (see col. 6, line 65 to col. 7, line 34).

As per claim 4, Kuroda et al. further teach that estimated traveling speed pattern outputting means extracts travel data matching current traveling environment data for each of the short sections, extracts a candidate traveling speed pattern representing a set to which a greatest number of the travel data belong, and outputs the estimated traveling speed pattern (see col. 6, line 65 to col. 7, line 34 and col. 4, lines 55-67).

As per claim 5, Kuroda et al. further teach that the travel environment data include date, hour, day of the week (see col. 6, lines 46-58), information on operation of on-board equipments including at least a wiper and a headlight, and sensing information obtained from on-board sensors including a raindrop sensor (see col. 1, lines 21-30 and col. 4, lines 20-25).

Prior art

2. The prior art made record and not relied upon is considered pertinent to applicant's disclosure:

Atkinson et al. ['948] disclose Traffic flow monitoring.

Arthur et al. ['322] disclose method and apparatus for vehicle management.

Breed et al. ['352] disclose method and arrangement for mapping a road.

Contact information

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mohamed Charioui whose telephone number is (571)

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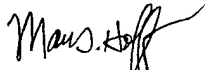
272-2213. The examiner can normally be reached Monday through Friday, from 9 am to 6 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marc S Hoff can be reached on (571) 272-2216. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Mohamed Charioui

3/12/06


MARC S. HOFF
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800